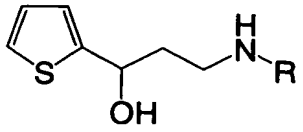
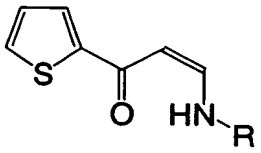
CLAIMS

1. A process for producing an *N*-monoalkyl-3-hydroxy-3-(2-thienyl)propanamine represented by General Formula (2):



(2)

wherein R is C_{1-4} alkyl, comprising the step of reducing a (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine represented by General Formula (1):



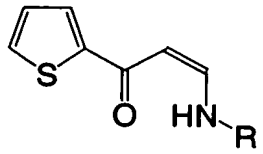
(1)

wherein R is as defined above.

2. The process according to Claim 1, wherein the (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine is reduced using sodium borohydride or sodium cyanoborohydride.

3. The process according to Claim 1, wherein the (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine is reduced in the presence of a proton-donating compound.

4. A (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine represented by General Formula (1):

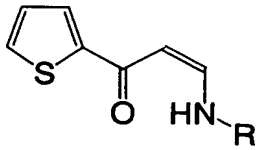


(1)

wherein R is C_{1-4} alkyl.

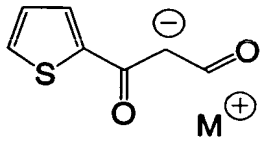
5. The (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine according to Claim 4, wherein R in General Formula (1) is methyl.

6. A process for producing a (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine represented by General Formula (1):



(1)

wherein R is C_{1-4} alkyl, comprising the step of reacting an alkali metal salt of β-oxo-β-(2-thienyl)propanal represented by General Formula (3):



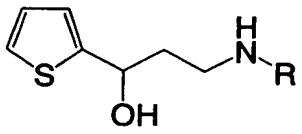
(3)

wherein M is an alkali metal atom, with a monoalkylamine compound represented by General Formula (4):

H_2N-R (4)

wherein R is as defined above.

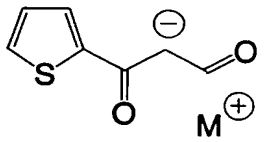
7. A process for producing an *N*-monoalkyl-3-hydroxy-3-(2-thienyl)propanamine represented by General Formula (2):



(2)

wherein R is C_{1-4} alkyl, comprising the steps of:

reacting an alkali metal salt of β-oxo-β-(2-thienyl)propanal represented by General Formula (3):

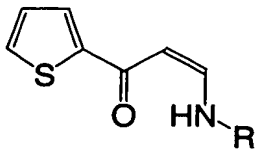


(3)

wherein M is an alkali metal atom, with a monoalkylamine compound represented by General Formula (4):

H_2N-R (4)

wherein R is as defined above, to give a (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine represented by General Formula (1):



(1)

wherein R is as defined above; and

reducing the (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine.

8. The process according to Claim 7, wherein the (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine is reduced using sodium borohydride or sodium cyanoborohydride.

9. The process according to Claim 7, wherein the (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine is reduced in the presence of a proton-donating compound.